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UNITED STATES DEPARTMENT OF AGRICULTURE

BULLETIN No. 477

Contribution from Office of Markets and Rural Organization
CHARLES J. BRAND, Chief

Washington, D. C. April 2, 1917

MARKETING AND DISTRIBUTION OF STRAWBERRIES IN 1915

By

O. W. SCHLEUSSNER and J. C. GILBERT,
Assistants in Market Surveys

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INTRODUCTION.

During the season of 1915 the Office of Markets and Rural Organization of the Department of Agriculture conducted an experimental market news service for strawberries, tomatoes, muskmelons, and peaches. This involved securing telegraphic reports of shipments of these products from all originating common carriers, and reliable reports of arrivals and prices of these products on the principal markets. This information was distributed free to growers and shippers by mail or by wire "collect" as desired.

In connection with this service, extensive surveys were made of the principal shipping areas of each of these crops and a representative of the office was stationed in one or more of the centers of production of each during the commercial movement to distribute direct to the producers all the market news at the command of the department.

The text of this bulletin is based upon observations made by the authors at shipping points, and by members of the staff working in the markets. The charts showing distribution are based upon reports furnished by wire during the shipping season by the railroads and boat lines handling important carload movements.

The tabulation of shipments by stations is compiled from the records of the various carriers as transmitted to the department at

Note.—This bulletin is of interest to strawberry growers, shippers, transportation companies, and consumers, and to all engaged in the trade in berries and fruits.

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the end of the season and is admittedly somewhat incomplete. It includes practically no shipments of less than full carloads and in many cases the exact records of the business of certain stations could not be obtained. Only a few carriers of importance in the interstate shipment of strawberries have failed to make any report of their business. The figures on pages 27 to 32 are therefore fairly comparable with those for 1914, published in Department Bulletin 237.[1]

An exception should perhaps be made in the cases of California and Washington, for later information leads to the belief that a number of the cars reported shipped from stations in these States in 1914 were probably less than carload shipments. Furthermore, the movement from one important section of California was largely by boat in 1915 and no record has been obtained, whereas this area furnished a large part of the movement as reported by the railroads in 1914. The berries handled by electric lines which do not move in standard carloads also constitute an element of uncertainty.

METHODS EMPLOYED IN DEALING WITH STRAWBERRY PICKERS.

As the shipment of strawberries over long distances has developed to the proportions of an important specialized industry, the problems of marketing have grown in number and complexity. Satisfactory quality on arrival in the distant market is impossible without a well-organized picking force of sufficient size to gather daily the berries which are ready for shipment. Irregularity in picking is almost sure to result in the shipment of many overripe berries, which cause serious deterioration before they reach the consumer.

The demand for pickers is so great in some sections that large numbers of pickers are brought in for the season. A few rainy days after the height of the picking is reached at a specific point may cause a migration of pickers to points farther north, thus curtailing the total output of a large shipping area. Serious losses may be suffered on individual crops even when the general supply of pickers is adequate.

A study of the whole picking problem is therefore an important part of the analysis of the marketing situation in any section, and any suggestions based upon successful experience in dealing with pickers should be of value.

The market quality of the berries depends very largely upon the knowledge and integrity of the pickers, who are, in most cases, paid for the quantity of berries which they deliver to the packing shed.

[1] See Sherman, W. A., Walker, H. F., and Schleussner, O. W. Strawberry Supply and Distribution in 1914. U. S. Department of Agriculture Bulletin 237.

Under these conditions there is often a tendency on the part of the pickers to do unsatisfactory work.

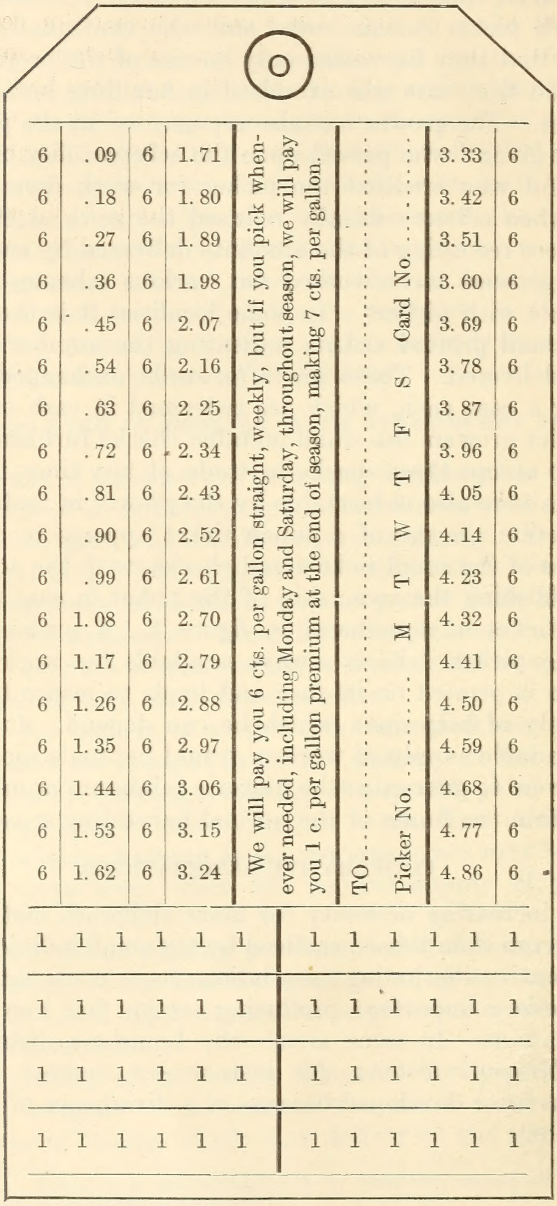
Various methods of handling pickers were observed during the 1915 season, the most satisfactory of which included a "field boss," who assigned each picker certain rows, and who continually supervised them to see that they harvested only berries of the proper degree of maturity, and that care was exercised in handling both the berries and the vines. The grower was also represented at the packing shed by a "ticket giver," who passed upon the acceptability of the berries delivered, and who credited the picker for work done. The field inspection when efficient usually reduced the work at the receiving shed to a mere recording of the amounts delivered by each picker.

Different growers have worked out various schemes for keeping their accounts with pickers. In some localities it is the practice to give them small printed tickets indicating the number of quart or pint boxes delivered. These are afterwards exchanged for tickets representing a case each, which are redeemed in cash once a week. In one district growers use small metallic checks furnished by storekeepers, who accept these checks in trade at any time, if so desired. These checks were also redeemable by the grower in cash each week.

In one section the use of a punch ticket appears to combine the best qualities of the small tickets and checks, with the added advantage of establishing the ownership of the ticket in case it should be lost. This ticket is reproduced in figure 1. A promise to pay a bonus to the picker if he is always available for work during the entire season is printed on its face and tends to insure the grower a regular supply of help upon which he can depend. It is probable that a dependable supply of workers would be made more certain if the grower were to guarantee the picker a minimum number of working days within the limits of the normal harvesting season.

COOPERATIVE ASSOCIATIONS.

With the increasing necessity for more elaborate methods of disposal of the crop than those practiced by the small individual growers many cooperative marketing associations have come into existence. Practically every important producing section has one or more of these associations. In some areas—the Louisiana district and the southwest Missouri district, for instance—a number of different organizations have developed because of a divergence of interests, or on racial lines.



6	.09	6	1.71	We will pay you 6 cts. per gallon straight, weekly, but if you pick whenever needed, including Monday and Saturday, throughout season, we will pay you 1 c. per gallon premium at the end of season, making 7 cts. per gallon.	TO.....	Picker No.	M	T	W	T	F	S	Card No.	3.33	6
6	.18	6	1.80											3.42	6
6	.27	6	1.89											3.51	6
6	.36	6	1.98											3.60	6
6	.45	6	2.07											3.69	6
6	.54	6	2.16											3.78	6
6	.63	6	2.25											3.87	6
6	.72	6	2.34											3.96	6
6	.81	6	2.43											4.05	6
6	.90	6	2.52											4.14	6
6	.99	6	2.61											4.23	6
6	1.08	6	2.70											4.32	6
6	1.17	6	2.79											4.41	6
6	1.26	6	2.88											4.50	6
6	1.35	6	2.97											4.59	6
6	1.44	6	3.06											4.68	6
6	1.53	6	3.15											4.77	6
6	1.62	6	3.24											4.86	6

1	1	1	1	1	1		1	1	1	1	1	1	
1	1	1	1	1	1		1	1	1	1	1	1	
1	1	1	1	1	1		1	1	1	1	1	1	
1	1	1	1	1	1		1	1	1	1	1	1	

FIG. 1.—Ticket used by strawberry pickers.

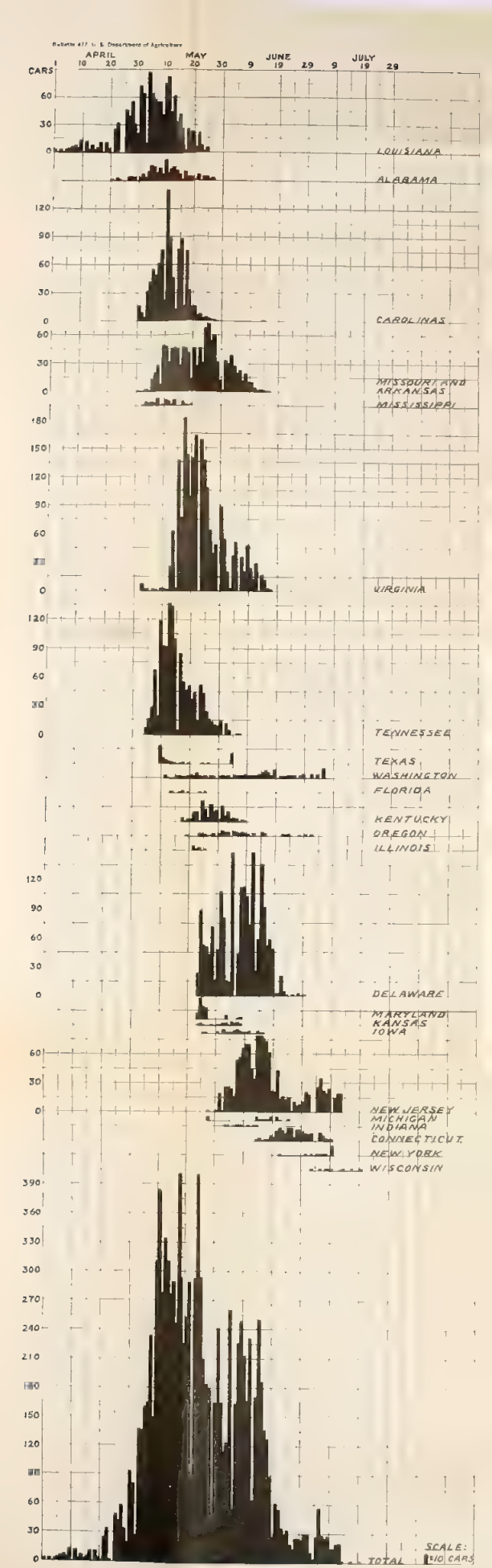
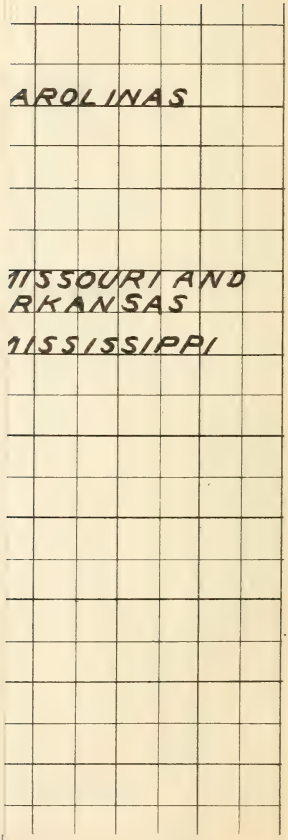


FIG. 6.—VOLUME AND LENGTH OF SEASON OF STRAWBERRY SHIPMENTS FROM IMPORTANT GROWING DISTRICTS, 1916



WING DISTRICTS, 1915.

These organizations have relieved the grower of most of the details of the disposal of his crop, and in many cases have undertaken the difficult responsibility of securing a sufficient quantity of supplies of proper quality, such as berry plants, fertilizers, crates, and boxes. Some associations even maintain a labor bureau for securing help during the harvesting season. The success of such a cooperative organization depends upon the united efforts of all members to maintain a high degree of efficiency and so to frame the requirements of the organization that those composing it will feel the responsibility of their membership.

In some cases, by concerted action, a number of local organizations have secured a high degree of uniformity in the grade and pack of the berries.

All associations do not perform the same functions for their members, as some of them take the entire responsibility for the disposal of the crop, and others only load cars which are consigned to various firms in the markets as designated by the growers. Some associations practically pay cash for berries delivered, and others do not. Various methods of handling the business of the association have been worked out to meet the requirements of the different types of business carried on.[1] Different associations have developed different types of receipts to be given the growers for berries delivered. A few of these typical forms are shown on pages 6 and 7.

Figure 2 is the type of receipt used by an association which sold cars on track at the loading point to representatives of northern wholesale houses. Under these conditions the prices for the different grades and varieties are usually established by noon each day, and as the berries are not delivered at the cars until afternoon or evening, the price can be indicated on the receipt when it is issued to the grower.

Figure 3 is the form used in a locality where the association does not undertake the sale of the berries. In 1915 this association purchased supplies for its members, arranged with the railroad for an adequate supply of iced cars, and kept a record of the berries shipped and of the names of the firms receiving them. The actual disposal of the berries was arranged for by the grower, who dealt directly with the representatives of the wholesale houses in the single market to which all berries from this section go. The grower made out his receipt in duplicate, giving one copy to the bookkeeper, who made out the car manifests. These were used as delivery sheets by the agent in the market, who delivered the different lots of berries to the various consignees as requested by the growers. Such an arrangement as this is possible only where all berries are sold on consignment.

[1] See Nahstoll, G. A., and Kerr, W. H. A System of Accounting for Cooperative Fruit Associations. U. S. Dept. of Agriculture Bul. 225, 1915.

..... COUNTY STRAWBERRY GROWERS ASSN.

INCORPORATED.

....., 191...

Received of.....
Grower's name.

CRATES.		GRADE.		
.....	Aroma.	3X	@.....	$.....
.....	Aroma.	2X	@.....	$.....
.....	Gandy.	3X	@.....	$.....
.....	Gandy.	2X	@.....	$.....
.....	Klond.	3X	@.....	$.....
.....	Klond.	2X	@.....	$.....
.....	Crates.	**Total Amt.**		$.....
		Less 5½¢ per crate com.		$.....
			Net Balance	$.....

Car No. .....

....., Manager.

FIG. 2.—Receipt used by cooperative association for strawberries delivered by growers.

....., 19...

From.....
Grower's name.

Consignees.	No. packages.	Size.	Kinds.
To.....			
.....			
.....			
.....			
.....			
.....			

Car No. .....

FIG. 3.—Receipt used by cooperative association for strawberries delivered by growers.

Grower's Shipping No. .....

Date....., 191...

RECEIPT No. 4451.

Cases 24 Boxes Strawberries graded A No. .....

" " " " B No. .....

Loaded in Car No. ..... Initial of Car.....

No. of Cases rejected.....

No. Cases transferred to car..... No. Cases transferred from car.....

....., Inspector.

FIG. 4.—Receipt used by cooperative association for strawberries delivered by growers.

Figure 4 is typical of the forms used by associations which assume responsibility for assembling and disposing of the berries. This particular form provides for the contingency of transfers of cases from one car to another in order to fill orders for certain varieties. This receipt also has the desirable feature of attaching responsibility for inspection to a particular inspector. Such features are found helpful in securing better grading and packing.

The expenses of the association which the grower necessarily must bear consist of a few well-defined items, namely: First, salaries for the manager, sales manager or other officers, the inspectors, and any other necessary help; second, rental of or taxes on loading sheds, and depreciation of property, such as loading sheds, offices, etc.; third, stationery, postage, telegrams, and other miscellaneous items. The necessary money is secured either by charging the grower a fixed sum per crate of berries or a certain percentage of the gross returns.

SALES METHODS COMMONLY EMPLOYED.

Under all present systems of doing business it appears necessary that the large operators station their representatives in the producing areas in order to deal with the association manager or the individual grower, as the case may be. Apparently both buyers and growers find it most satisfactory, under present conditions, to do business by this method. However, with established grades and standards for berries and an impartial inspection service conducted by some disinterested party, it is possible that buyers' and solicitors' salaries and traveling expenses might be saved. In some instances the representatives of the wholesale houses act entirely as cash buyers, while in other instances they solicit consignments and endeavor to secure the quality and variety of berries desired by their firms.

TRANSPORTATION.

So vital is the service of the railroad and refrigerator-car companies to the soft-fruit business that any discussion of marketing strawberries would be incomplete without mention of railroad method and equipment. At various points during the 1915 season it was observed that each road dealt with the shippers according to the demands of the local situation rather than according to any fixed program.

All service which a railroad may offer must of necessity be based on published tariffs, and whether the railroad assumes all or little responsibility, there must be a tariff provision which covers the items. The railroad agent deals with the shippers, either as individuals or associations, and they must negotiate through him for service in distributing the berry crop. In the localities where the volume of shipments is large, the railroads usually have provided adequate facilities for the handling of berries.

In one instance it was noted that where there was competition for the tonnage the roads provided splendid facilities for handling the berries, icing the cars, and insuring rapid movement to destinations. At another point served exclusively by one of the same roads no facilities were provided, except the right to load cars on the team tracks near the station. At the particular competitive station referred to the railroads even took over the loading and bracing of the cars, and assumed responsibility for the condition of the load on arrival. At several noncompetitive stations visited, however, the shipper did all the loading, stripping, and bracing in the cars and paid all costs connected with these operations. At most shipping stations where observations were made the railroads or the refrigerator-car lines did the initial icing of the cars and made arrangements for all necessary icings in transit.

A STUDY OF THE LOUISIANA DISTRICT.

One of the authors was stationed in the Louisiana strawberry district during the active shipping season of 1915 to distribute telegraphic market news and to study distribution problems there. The office did not have an opportunity to make studies in similar detail elsewhere during that season.

HISTORY.

The Louisiana district is one of the most important commercial strawberry-growing districts in the United States. Probably no area of equal size produces a larger quantity of berries. The entire district is confined to the parish of Tangipahoa, the production area being located on both sides of the line of the Illinois Central Railroad from Ponchatoula to Amite City, a distance of 20 miles.

The industry is very important locally, many of the farmers being almost entirely dependent upon the strawberry crop for their cash income. Its importance is illustrated by the fact that in one town the school year is so arranged that the vacation comes at the time of the strawberry harvest, leaving the children free for berry picking.

The time of shipment of the Louisiana crop also makes it of peculiar interest to the dealer and consumer, as it is the first region shipping strawberries largely in carloads, the season normally beginning about April 1.

The industry has been in existence for many years, but only since 1910 has it grown to considerable proportions. During the early years Chicago was the sole market, and this city still takes a heavy supply. However, in the 1915 season more than 60 markets, scattered from Boston to Seattle, were reached, thus giving the crop a wider distribution than that from any other section, and making it a matter of national interest.

MARKETING ARRANGEMENTS.

The strawberry growers in Louisiana are well organized, practically all being members of local shipping associations. In fact, there are frequently two, three, or even four such associations at one station. There seems to be a rather unnecessary duplication of selling expense by reason of the operation of several associations at shipping points where the business is so limited that all of it could easily be handled by one association at a smaller cost.

The northern houses usually send a large number of buyers to the district during the car-lot movement, and sales are made on a cash f. o. b. shipping-point basis, inspection being made and acceptance being taken before the cars move. In general, this method has proved satisfactory. At Ponchatoula practically all cars are sold at public auction. As this point has the reputation of producing superior berries, the auction has worked satisfactorily. It is unique in that it is the only point in the United States, so far as is known, where full carloads of strawberries are sold at auction.

The association charge for selling berries usually is 5 cents per crate, a refund generally being made to the growers after expenses are paid. A considerable portion of the crop is handled by a distributing company for the account of local associations, a fixed charge being made for this service.

A very essential feature of the work of the local associations is the financing of the growers by supplying them with fertilizers, feed, crate material, etc. The purchase of supplies through the local associations is especially important in Louisiana, and this form of association activity is growing.

QUALITY AND PACK.

In general, Louisiana berries enjoy a fairly good reputation for quality and pack. Varieties are fairly well standardized, and when weather conditions have been favorable, deterioration in marketing has not been excessive. In certain seasons, when the weather has been unfavorable, the losses from deterioration have been heavy.

Berries usually are carried from the field to the packing shed in picking trays, and are there packed in boxes. While the packing probably is as good as in most shipping sections, there is urgent need for improvement. A number of cars noted by the market reporters of the office showed very slack pack. One car in Pittsburgh was examined and the cups were found to be barely half full. Several dealers were arrested in that city for selling these short-measure cups of berries.

Two types of crates are in use, the unventilated (Hallock) with solid sides, and the ventilated (Dahlstrom) with slatted sides. Careful examination on the Chicago market showed that the berries packed in the ventilated crates consistently arrived in better condition, although in a few exceptional cases the reverse was true. Labels were used in 1915 for the first time. Wholesalers interviewed expressed themselves as pleased with the labeling of the crates and believed it added to the selling value.

SHIPPING.

Most of the Louisiana crop is shipped in express cars. These shipments generally have carried better than freight shipments, have given better satisfaction, and consequently have sold at consistently better prices.

The distribution of freight and express cars from the Louisiana district in 1915 to all markets is shown in Table 1.

TABLE 1.—*Destination points of berry cars shipped from the Louisiana district, season 1915.*

Destination.	Freight cars.	Express cars.	Destination.	Freight cars.	Express cars.
Aberdeen, S. Dak.	.....	1	*Minneapolis, Minn.	5	37
Bloomington, Ill.	2	.....	*Montreal, Canada	.....	25
*Boston, Mass.	.....	46	Marshfield, Wis.	2	.....
Bridgeport, Conn.	.....	1	Mounds, Ill.	14	.....
*Buffalo, N. Y.	4	40	Muskogee, Okla.	1	.....
Burlington, Iowa.	3	.....	New York, N. Y.	.....	10
Calgary, Alberta.	.....	7	Oklahoma City, Okla.	1	7
Cedar Rapids, Iowa.	1	1	*Omaha, Nebr.	.....	41
Champaign, Ill.	1	1	Ottawa, Ontario.	.....	1
*Chicago, Ill.	355	292	Ottumwa, Iowa.	.....	1
Cincinnati, Ohio.	.....	1	Peoria, Ill.	.....	10
Cleveland, Ohio.	1	5	Philadelphia, Pa.	.....	3
Council Bluffs, Iowa.	.....	1	*Pittsburgh, Pa.	16	26
Davenport, Iowa.	6	2	Providence, R. I.	.....	7
*Denver, Colo.	.....	18	Pueblo, Colo.	.....	1
*Des Moines, Iowa.	12	18	Regina, Saskatchewan.	.....	2
*Detroit, Mich.	3	21	Rockford, Ill.	2	.....
Duluth, Minn.	2	.....	St. Joseph, Mo.	.....	2
East St. Louis, Ill.	1	.....	*St. Louis, Mo.	34	23
Elgin, Ill.	1	.....	*St. Paul, Minn.	6	22
Erie, Pa.	.....	2	Seattle, Wash.	.....	2
Fargo, N. Dak.	.....	2	Sioux City, Iowa.	1	12
Fort Wayne, Ind.	2	1	Sioux Falls, S. Dak.	.....	7
Freemont, Nebr.	.....	1	South Bend, Ind.	.....	1
Freeport, Ill.	4	.....	Springfield, Ohio.	1	.....
Grand Island, Nebr.	.....	3	Toledo, Ohio.	.....	5
Grand Rapids, Mich.	6	5	Topeka, Kans.	.....	5
Hastings, Nebr.	.....	1	Toronto, Ontario.	3	.....
*Indianapolis, Ind.	11	19	Tulsa, Okla.	.....	4
Jamestown, N. Y.	.....	1	Waterloo, Iowa.	.....	1
*Kansas City, Mo.	1	26	Winnipeg, Manitoba.	1	12
Lafayette, Ind.	4	.....	Worcester, Mass.	.....	3
Lincoln, Nebr.	.....	15	Carbondale, Ill.	11	.....
Louisville, Ky.	4	2			
*Milwaukee, Wis.	14	10	Total.	536	854

* Cities used over 15 cars during the season.

EXTENT, LENGTH, AND VOLUME OF MOVEMENT FROM ALL DISTRICTS.

The extent, length, and volume of the commercial strawberry movement of the various important districts of the United States, as reported by telegraph to the Office of Markets and Rural Organization, are illustrated in figure 5. This chart is incomplete, since omissions were noted frequently in the reports received from the railroads daily by telegraph. Of total shipments throughout the United States, amounting to 13,409 cars, the railroads reported by telegram the movement and destination of 11,059½ cars, or 82.5 per cent of the total as furnished from their records at the end of the season. The reason for the incompleteness of these reports may be traced to the fact that no attempt was made to report on l. c. l.[1] movement by telegram. When the sources of information are scattered and reports are voluntary and without compensation, a certain

[1] l. c. l. is the usual abbreviation for less than carload lots.

number of errors and omissions must be expected. Physical conditions made it impossible to secure records of some cars, railroad records in some cases being in such shape that it was impossible to get the required information. However, on the whole, railroad officials cooperated so heartily and effectively that it can be said that the reports present the best picture of the proportionate movement from different sections, the extent and length of that movement, and the volume on any one day, that has yet been presented.

The reports begin with the opening of the carload season in Louisiana. Although Florida had been shipping berries in "pony" refrigerators[1] for some time prior to this, and shipped some carloads a short time after the Louisiana movement was started, at the time the work was inaugurated early in April it was impossible to secure complete reports of Florida shipments.

The largest shipment made in any one day from any one section was 182 cars from the Norfolk section, May 18. The same section shipped 163 cars May 22, 159 cars on May 24, and 142 cars May 19. The Carolinas made the next largest shipment, 140 cars on May 11, while Norfolk had 139 cars May 27, 137 cars May 25, and Tennessee 136 cars May 12 and 134 cars on May 13. These three sections, which are among the heaviest shipping sections in the United States, were at their height at practically the same time.

The Delaware-Maryland district, which is also a heavy shipper, was very fortunate in 1915 in that it escaped practically all of this very severe competition, heavy shipments from this district not beginning until May 25 and continuing until June 19. Early local berries, regarding which no figures are available, are probably heavy competitors of Delaware and Maryland stock in the northern markets, as are also Jerseys. The chart of shipments would seem to show that, of the northerly districts, the Delaware-Maryland section was peculiarly favored with desirable market conditions. These conditions were reflected in the satisfactory prices paid on the markets for Delaware and Maryland stock during the season.

The period of heaviest shipments for the whole country was from May 10, when 311 cars were shipped, to May 26, when 296 cars moved. During this period there were only four days when less than 275 cars were moved, while this number was never reached at any other time during the whole season. On May 23, the heaviest shipping day of the season, 401 cars were moved, and on May 25, 400 were shipped. The third largest day was May 11, with 384 cars. While every shipping season will not coincide exactly with that of 1915 (that season being a trifle late in the southern districts), a heavy berry movement between approximately the same dates can be expected each year.

[1] "Pony" refrigerators are small refrigerators usually holding 64 or 80 quarts, and usually shipped by express.

COMPARISONS OF PRICES RECEIVED FOR STRAWBERRIES ON IMPORTANT MARKETS.

Figures 6 to 11 show comparisons of the jobbing prices for berries from various sections, on the New York, Pittsburgh, Buffalo, Chicago, St. Louis, and St. Paul markets from day to day. These were prepared from the telegraphic reports received from the markets during the season. The low and high prices are represented for each day, the range between the two being blacked in. Where only one price was quoted, the price variation from day to day is shown by a single line. On days when there were no berries from a certain section on the market and no quotations, this fact is shown by a dotted line. The prices quoted in New York are per quart, and those quoted in other markets are per 24-quart crate, as this type of crate is the one most commonly used in these markets. Quotations covering berries from sections using styles of crates other than 24-quart (such as the 32-quart from Delaware and Maryland) have been reduced to a basis of 24-quart crates for purposes of comparison. The black horizontal line running from left to right indicates a price of 10 cents per quart, or $2.40 per 24-quart crate, this being selected as a median line.

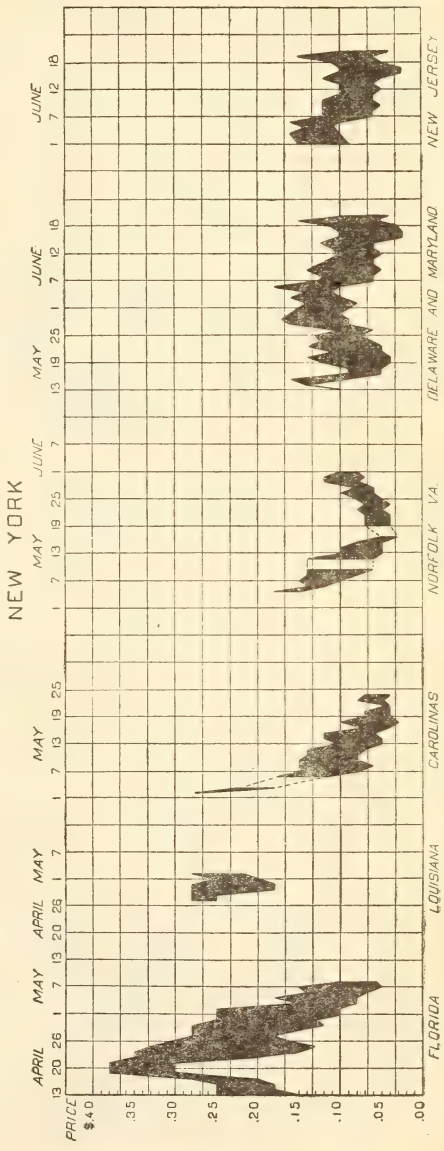


FIG. 6.—Jobbing prices of strawberries on the New York market in 1915.

DIFFERENCES IN PRICES CAUSED BY RANGE IN QUALITY.

The width of the black space on any one day represents the range in quality between the best and poorest berries appearing on the

market on that day from the section indicated. The need for standardization of growing and packing methods is illustrated only too well by the wide ranges in price throughout the season.

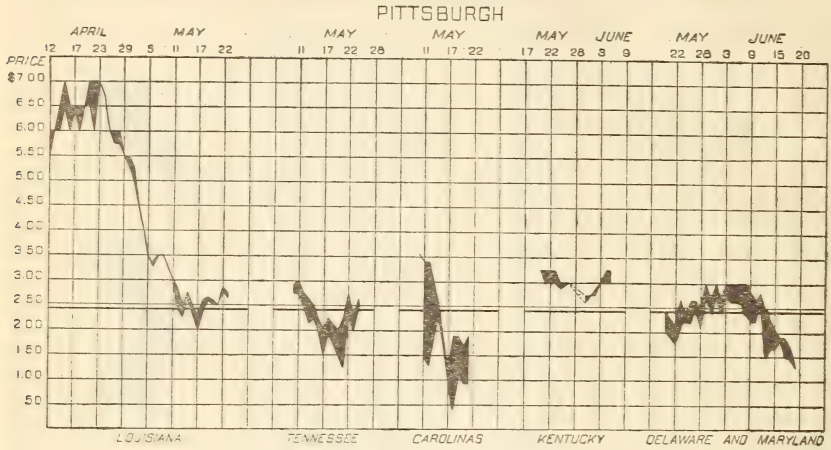


FIG. 7.—Jobbing prices of strawberries on the Pittsburgh market in 1915.

Of the various sections represented, Florida appears to have the widest range in quality, on May 23 showing a range of 20 cents per

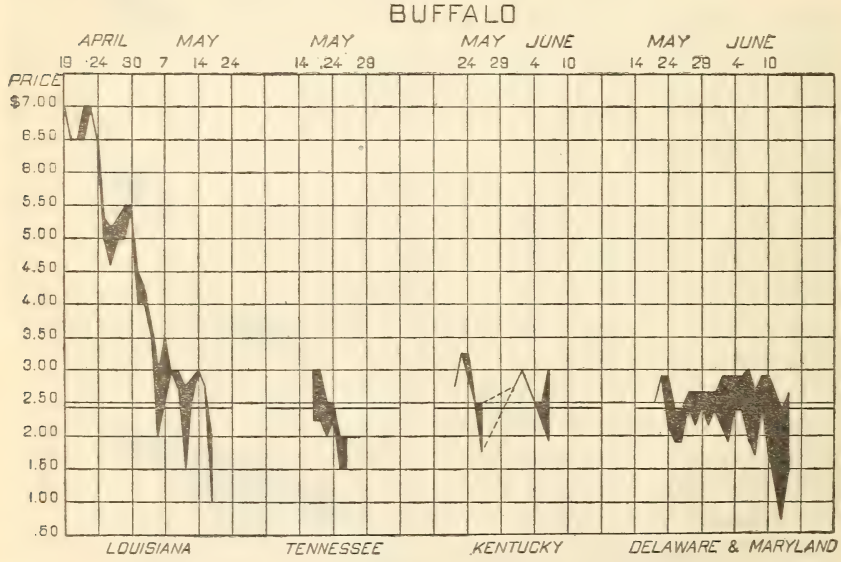


FIG. 8.—Jobbing prices of strawberries on the Buffalo market in 1915.

quart (from 15 to 35 cents) in New York. This may be partially due to the fact that when prices are high the price ranges are naturally more marked. On the other hand, Louisiana berries sold at high

prices for most of the season in all markets, yet the price range was comparatively much narrower, the greatest variation between good

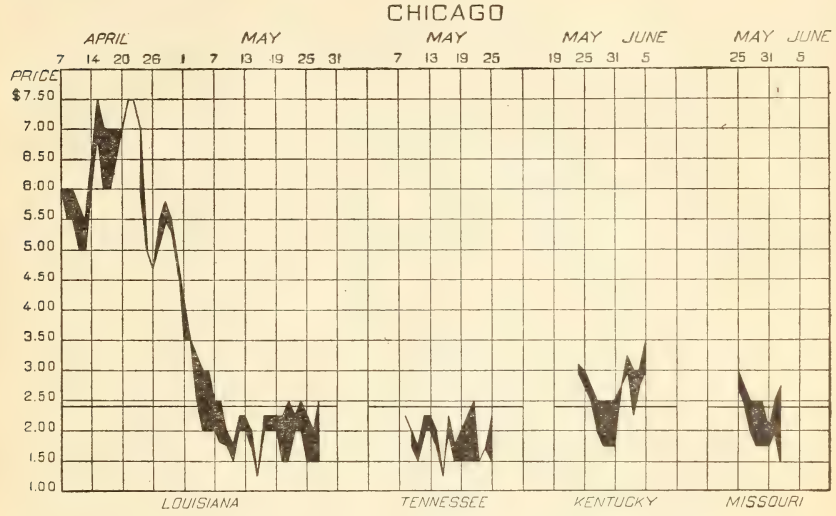


FIG. 9.—Jobbing prices of strawberries on the Chicago market in 1915.

and poor being 10 cents per quart (from 18 to 28 cents) in New York on May 29. In other markets during most of the season the range on Louisiana berries was seldom over 5 cents per quart, and usually was much less than this. The wide range in prices is generally more marked on eastern markets than on western. This may be traced in part to the well-known fact that western produce which supplies western markets generally is more carefully graded and packed than eastern, because associations are stronger in the West and also because high freight rates make the marketing of inferior grades unprofitable.

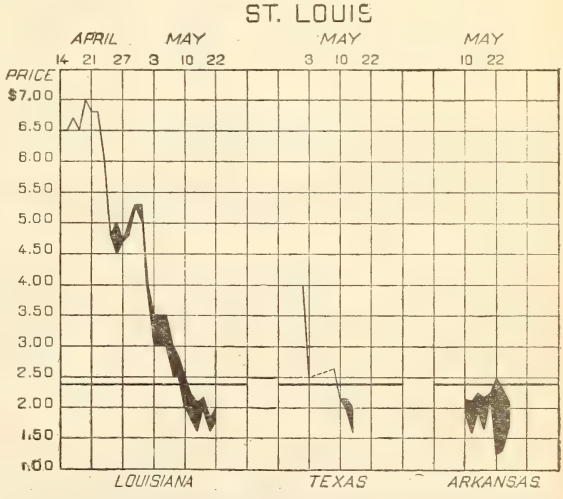


FIG. 10.—Jobbing prices of strawberries on the St. Louis market in 1915.

In general it can be said that the range in prices indicates a range in quality and leads to the conclusion that methods of grading and packing could be much improved in all sections. Especially is this true of sections that regularly show wide differences between their good and poor qualities. They can profit by adopting the methods of sections producing berries of excellent reputation, such as Kentucky, which never showed a price range greater than 25 cents per 24-quart crate on the Pittsburgh market throughout the entire season. Often there are individual growers who uniformly secure top prices for their goods, while others always receive the lowest prices. The difference between top prices and bottom prices is often a difference

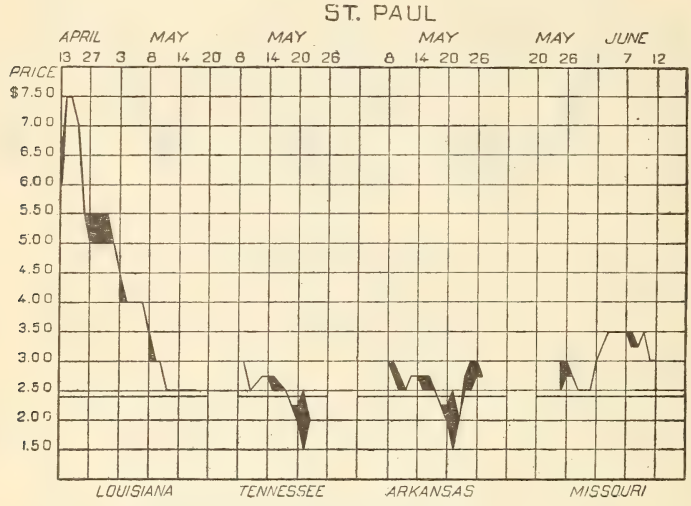


FIG. 11.—Jobbing prices of strawberries on the St. Paul market in 1915.

between profit and loss, or success and failure. This emphasizes the fact that berries of high quality usually pay for the extra cost of their production.

It should not be inferred, however, that the price range depends entirely on quality. Other elements enter in, especially the element of salesmanship. One salesman may habitually secure less than another. Nevertheless the greatest single factor in price range in one day is quality.

DIFFERENCES IN PRICES CAUSED BY TIME OF SHIPPING.

The curves showing the prices of berries from the different sections show that first shipments from any section usually top the market. As shipments increase, the market usually declines. Later there may be a reaction and an advance. A notable exception to this rule in 1915 was Louisiana, which showed an advancing and strengthening market in practically every city for 10 days after the season

opened. This may be attributed to two reasons—light shipments and demand stimulated by satisfactory quality[1]. The same causes operated to cause a consistent advance in Pittsburgh and some other markets for two weeks after first receipts from Delaware and Maryland. These conditions, however, are unusual. In general, as the season in each district advances, the price is influenced by deteriorating quality[1] due to continued picking and by increased supplies.

AVERAGE QUALITY OF STRAWBERRIES SHIPPED.

In 1915 certain sections suffered from unfavorable weather such as drought during the growing season and rain at harvest time. Certain of these sections suffered the results of unsatisfactory quality by receiving uniformly unsatisfactory prices. Tennessee was unfortunate in this respect. In addition, the great bulk of her crop came on the market at the time of heaviest shipments from May 10 to 25. Norfolk and the Carolinas suffered in the same way. However, a comparison of these two sections with others on the market at the same time shows their quality must have been unsatisfactory, as they sold on almost every day at lower prices than the others.

In New York, average berries from the Norfolk section never sold above 10 cents from May 9 to May 24. From May 9 until May 18, the date of last receipts in New York, Carolina berries sold above 10 cents on only two days. Beginning on May 9, and up to June 15, Delaware and Maryland berries brought less than 10 cents for best stock on only two days. On any given day they brought a considerably better price than Norfolks and Carolinas, and continued at a fairly satisfactory level the entire season.

In Pittsburgh, the Carolinas and Tennessees sold at low prices compared to Kentucky and Delaware-Maryland stock. The Kentucky stock did especially well, the poorest never selling as low as 10 cents per quart. Kentucky berries generally have an enviable reputation based on good pack.

The comparative inferiority of Tennessee berries was also shown in Buffalo where prices were lower than for Kentucky and Delaware-Maryland berries selling at the same time. In Chicago the Tennessee berries sold as high as $2.40 a crate (10 cents a quart) on only one day, and even then most of them were sold at a lower price. However, there are no quotations available for a satisfactory comparison with other berries in the Chicago market at the same time, the chief competition being from Louisiana berries, which were quite poor, as they were the last shipments at the end of a long season. A few Tennessee berries were also quoted on the St. Paul market and sold at practically the same prices as the Arkansas stock offered.

[1] The term "quality" is used in the commercial sense indicating satisfactory grade upon arrival at market and delivery to the consumer.

In general, the market quality of Louisiana, Kentucky, Missouri, Arkansas, and Delaware-Maryland berries seems to have been fairly satisfactory in 1915, while the Tennessee, Norfolk, and Carolina stock was not quite so well received. From this it must not be inferred that identical conditions will prevail in the future, as they may be quite reversed. The foregoing refers to the 1915 season only.

DISTRIBUTION OF STRAWBERRIES IN 1915.

Shipments of straight carloads of strawberries to 299 different towns and cities in the United States during the season of 1915, according to telegraphic reports furnished to the Office of Markets and Rural Organization by the railroads during that season have been tabulated by districts and destinations in Table 2. This tabulation includes reports of all diversions, so far as it was possible to secure them. Fairly comprehensive arrangements were made with railroads at the beginning of the season, so that it is believed reports of diversions are practically complete, but this table is given as an approximate rather than an absolutely correct report.

According to these reports the center of heaviest strawberry consumption in 1915 was what may be called the metropolitan district, including New York, Melrose (upper New York City), Jersey City, Newark, and Paterson. This district may be considered practically a unit, as the supplies received in Jersey City are sold largely in New York, though to some extent in New Jersey, while Newark and near-by cities often purchase heavily on the New York market. The metropolitan district absorbed, in all, 1,964 cars. The next heaviest consumer was Chicago, with 884 cars; third, Boston, with 781 cars; fourth, Cincinnati, with 396 cars; fifth, Pittsburgh, with 359 cars; and sixth, Philadelphia, with 300 cars. Other cities receiving 100 cars or more were Buffalo, N. Y., Cleveland, and Columbus, Ohio, Detroit, Mich., Kansas City, Mo., Minneapolis, Minn., Omaha, Nebr., Rochester, N. Y., St. Louis, Mo., and St. Paul, Minn. The relatively small number of cars of strawberries shipped to Philadelphia may be accounted for in part by the heavy receipts of l. c. l. shipments from near-by districts. The figures for Boston and New York include boat shipments from the Norfolk district reduced to equivalent carloads.

Many small towns and cities with populations of but a few thousand received supplies of from 1 to 10 cars during the season. While these small markets are not heavy consuming factors individually, in the aggregate they take heavy supplies and are of great importance to shippers. It is altogether probable that many similar small markets which do not now receive full carloads could be developed to the advantage of both the strawberry grower and the consumer.

Figures 12A to 12C (facing p. 24) are maps representing graphically the distribution of strawberries as reported by wire in 1915 for all dis-

tricts shipping more than 175 cars. It will be seen that in most cases each producing section shipped very heavily to a certain limited consuming area, and in some cases entirely confined its shipments to that area

The widest distribution was reached in Louisiana (see fig. 12A), as from this district both Atlantic and Pacific coast markets were reached. This unusually wide distribution was due largely to lack of competition, as other districts do not produce so early, and also to geographical position, Louisiana being practically midway between the two. However, even this district depends largely upon a single market, as Chicago took 647 cars out of a total of 1,335.

Alabama shipped principally to Ohio and Michigan points, Cincinnati and Detroit taking 163 and 58 cars, respectively, out of a total of 314 cars. (See fig. 12B.)

The Carolinas, Virginia, and New Jersey districts depended almost entirely upon the Atlantic seaboard markets, especially Philadelphia, the metropolitan district, and Boston. (See fig. 12B.) These districts shipped very lightly to points no farther west than Pittsburgh and Buffalo, and depended very generally upon the large markets. New Jersey, for instance, shipped 800 cars to Jersey City and 100 to New York, out of a total of 1,291 cars.

In contrast, the Delaware-Maryland district (fig. 12B) distributed heavily to smaller towns, and also to towns in the interior of the States of Pennsylvania, New York, Ohio, and Michigan, and even as far west as Chicago. A much smaller percentage of the total movement went to the large seaboard markets, while towns such as Elmira, N. Y., Erie, Pa., Bridgeport, Conn., Altoona, Pa., Worcester, Mass., and Wilkes-Barre, Pa., were supplied. Many others received fairly liberal shipments. It is a question whether this efficient distribution was not a considerable factor in the successful marketing of the berries from this district in 1915.

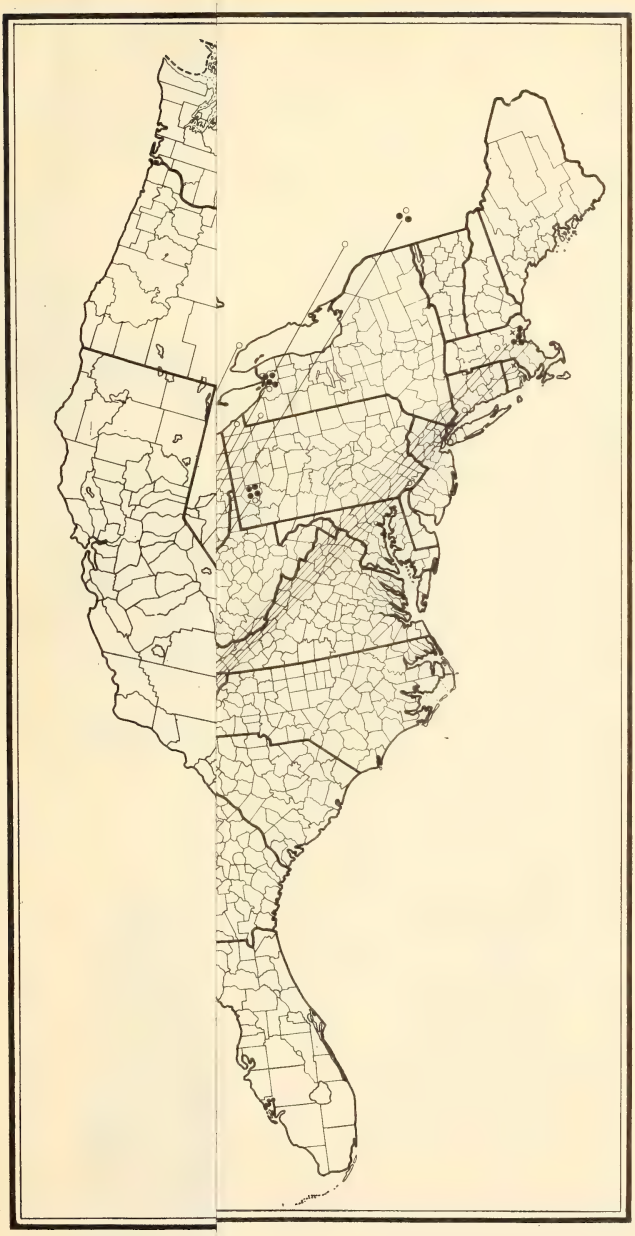
West Tennessee (fig. 12B), with 506 cars, probably secured as wide distribution as any area with a similar quantity of shipments, reaching as far as Jacksonville, Fla., and Macon, Ga., to the southeast, Bangor and Portland, Me., to the northeast, and Winnipeg, Manitoba, Sioux Falls, S. Dak., and Lincoln, Nebr., to the northwest. Ohio points received the heaviest shipments going to any one State.

The distribution from East Tennessee (fig. 12B), with a total of 693 cars, was comparatively more restricted, a much larger percentage of the crop going to Ohio points. Cincinnati alone took 203 cars, while Dayton, Columbus, Cleveland, and Toledo each received 30 cars or more. From 1 to 20 cars were sent to numerous other Ohio points. Illinois and some western points received small shipments, while one car went to Regina, Saskatchewan.

Of the western strawberry sections, the Ozark district (fig. 12c) secured fairly widespread distribution, sending cars as far east as New York and Ottawa, Ontario, and as far west as El Paso, and a considerable quantity (43 cars) to Denver. The chart shows, however, that Missouri River and near-by points (such as Omaha, Sioux City, St. Joseph, Topeka, Kansas City) and northwestern points (such as Minneapolis and St. Paul) form the principal outlets for this district.

The Judsonia, Ark., district (fig. 12c) shipped more heavily to Mississippi River points and cities nearby, and only lightly to Missouri River markets. St. Louis absorbed 151 cars of a total of 297. This district also made scattering shipments to eastern and Canadian points. Springfield, Ill., with 8 cars, received the heaviest shipments of any city east of the Mississippi River.

Washington and Oregon sections (fig. 12c) shipped principally to Canadian and northwestern prairie States. A few scattered cars were shipped as far east as Chciago and Detroit, but these eastern shipments amounted to but a small proportion of the total movement.



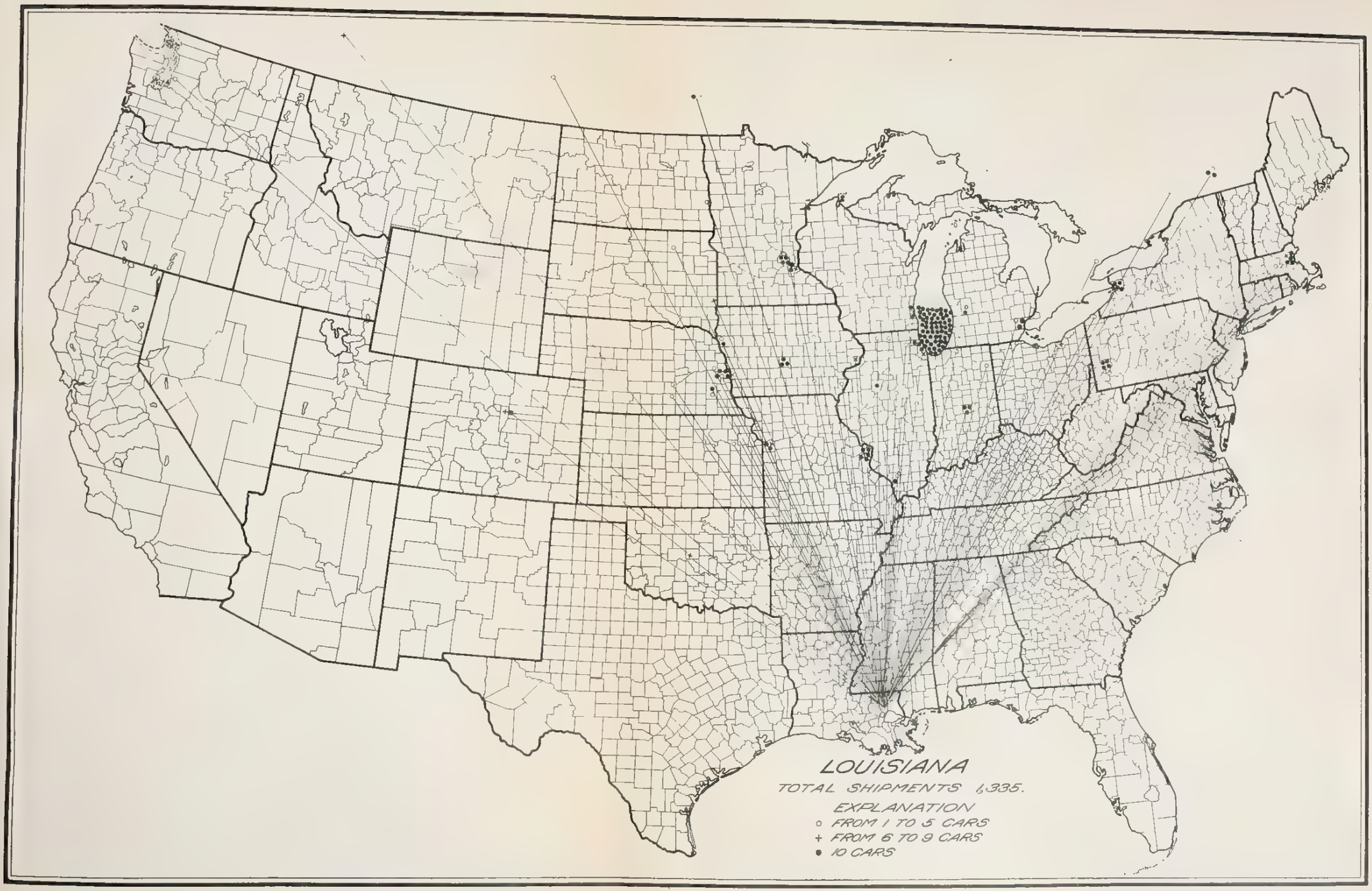
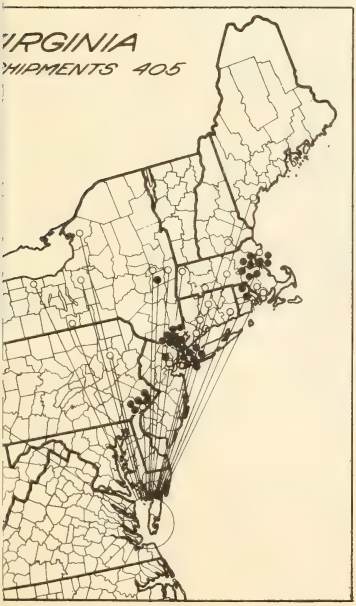
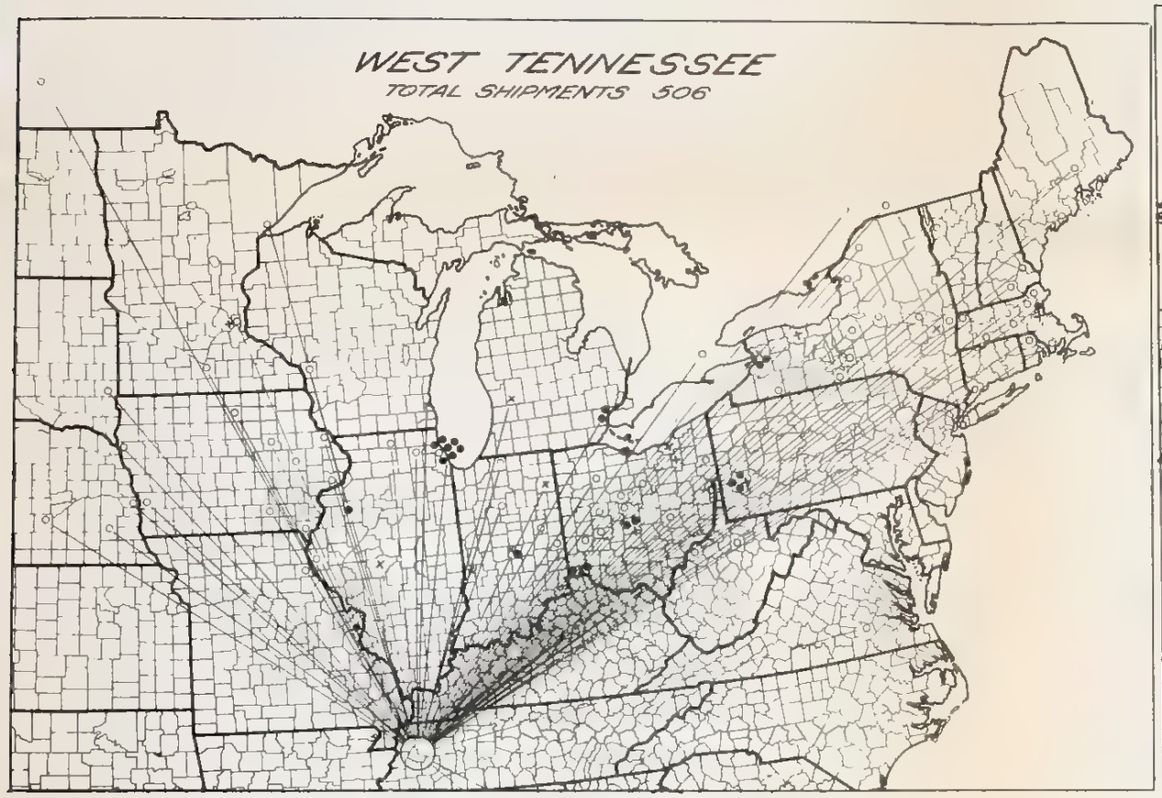
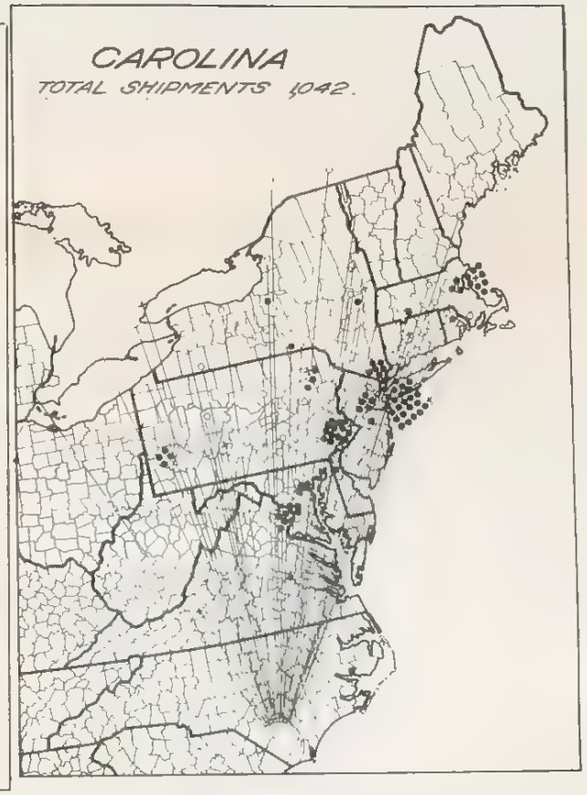
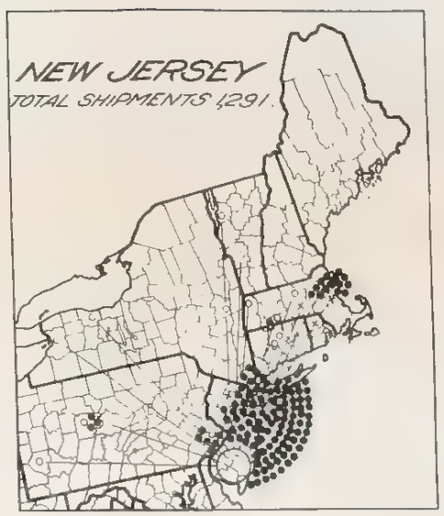


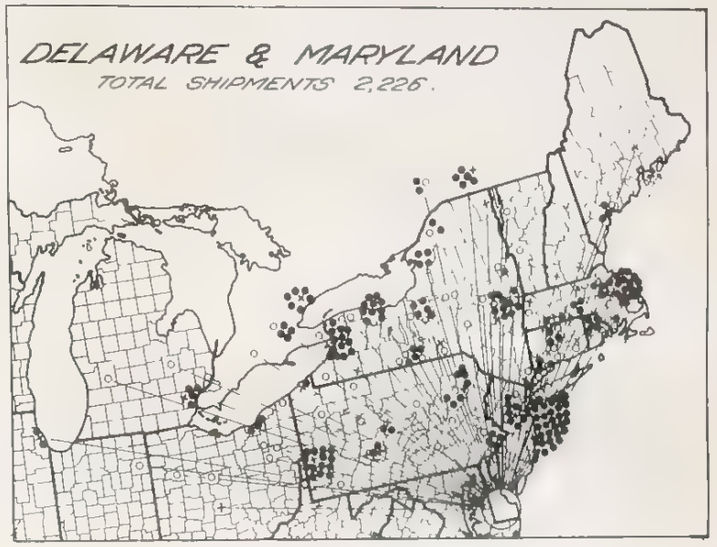
FIG. 12 A.—DISTRIBUTION OF STRAWBERRIES FROM IMPORTANT SHIPPING AREAS IN 1915.

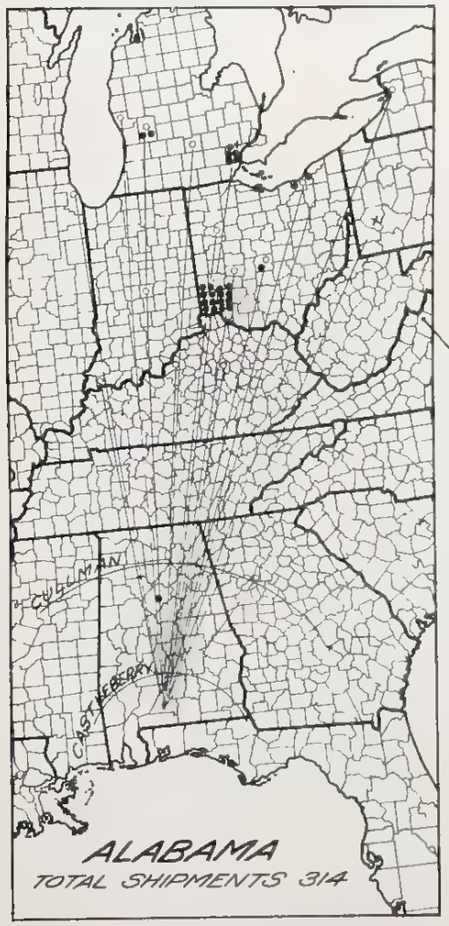

IRGINIA
HIPMENTS 405

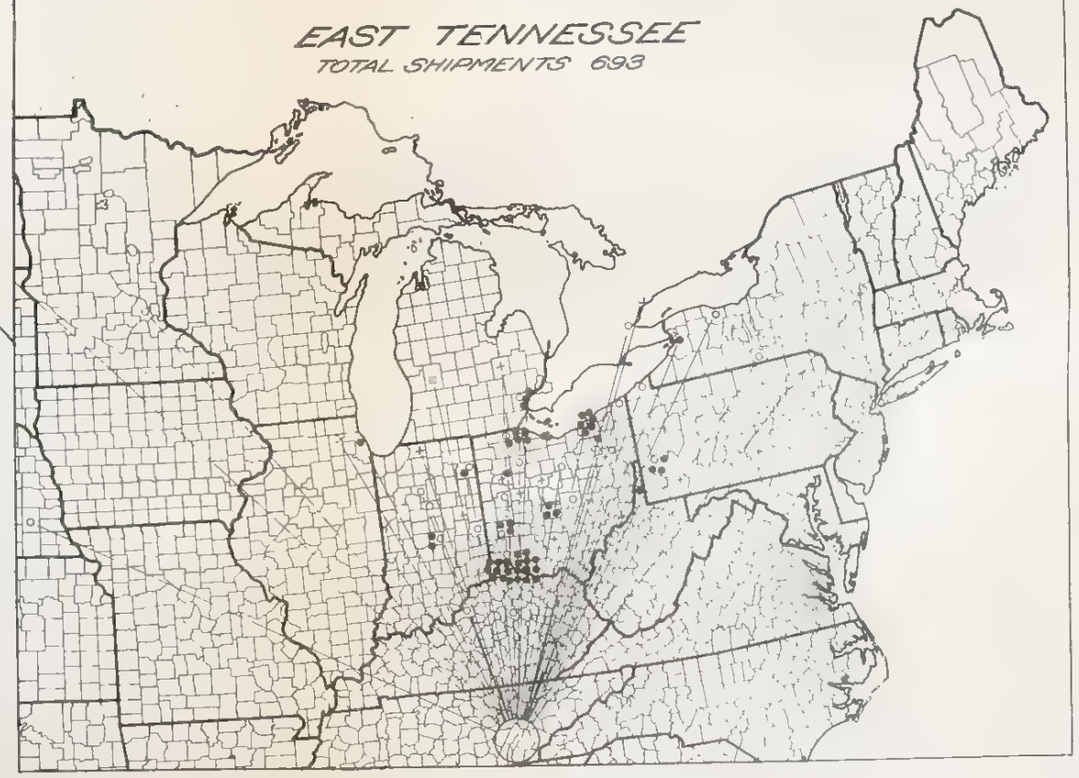












EXPLANATION
- ○ FROM 1 TO 5 CARS
- \+ FROM 6 TO 9 CARS
- • 10 CARS

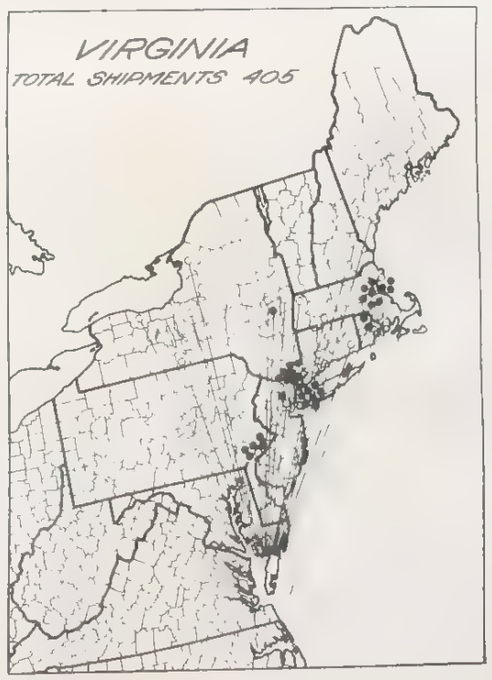


FIG. 12 B.—DISTRIBUTION OF STRAWBERRIES FROM IMPORTANT SHIPPING AREAS IN 1915.

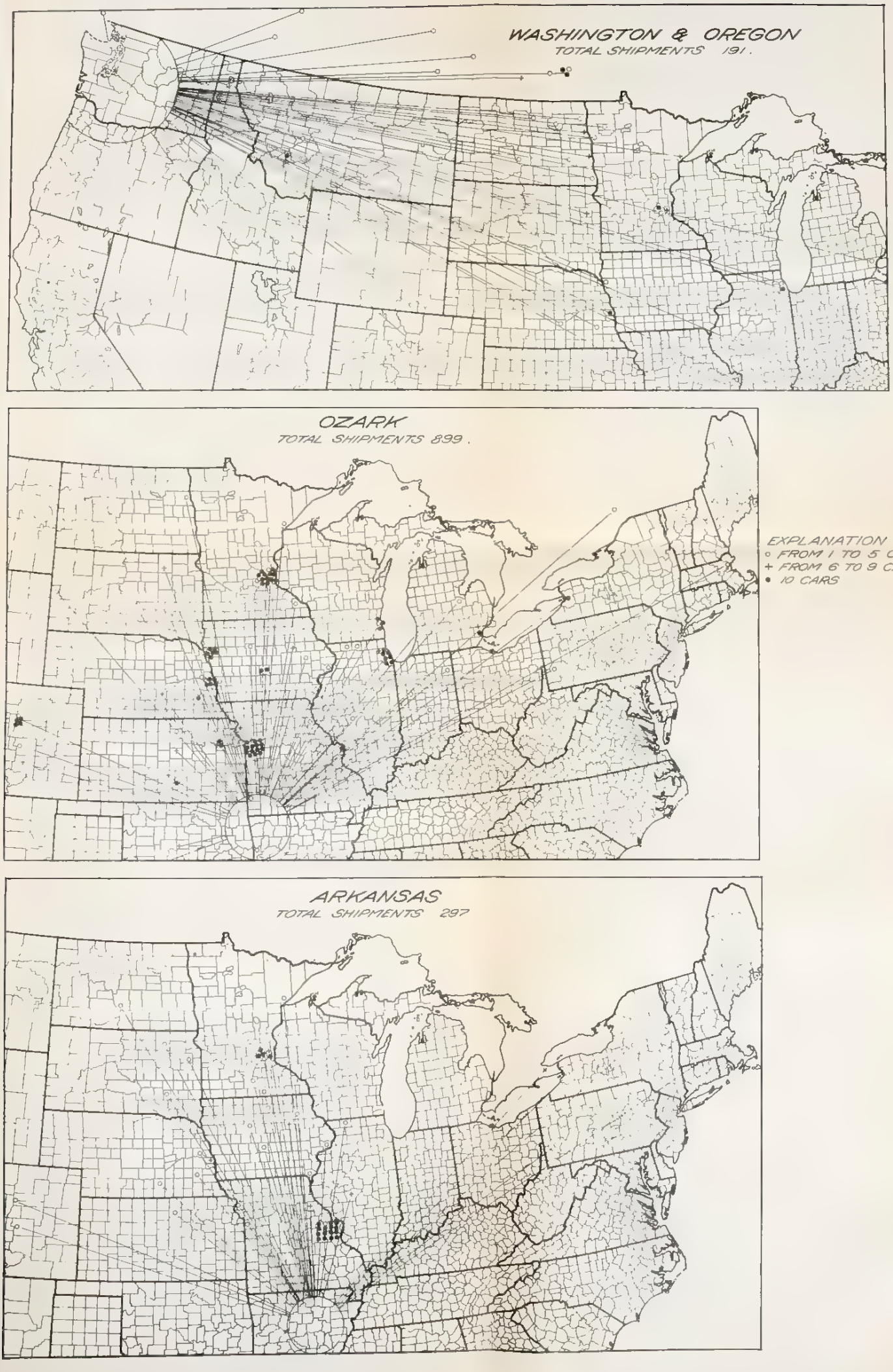


FIG. 12 C.—DISTRIBUTION OF STRAWBERRIES FROM IMPORTANT SHIPPING AREAS IN 1915.

TABLE 2.

Destination.	Louisiana.	Alabama.	Carolinas.	Arkansas.	Ozarks.	Virginia.	West Tennessee.	East Tennessee.	Texas.	Washington and Oregon.	Kentucky.	Delaware and Maryland.	Iowa.	New Jersey.	Michigan.	Indiana.	Connecticut.	New York.	Wisconsin.	Total receipts.
Aberdeen, S. Dak	1			1	6								1							9
Akron, Ohio		1					8	18			3	5								35
Albany, N. Y			10			10	6	1				56		2						85
Albert Lea, Minn				2	1															3
Allentown, Pa			1									3								4
Alliance, Ohio								2			1	2								5
Altoona, Pa			6									27								33
Amarillo, Tex									3											3
Amsterdam, N. Y							1					10								11
Ashtabula, Ohio												3								3
Atchison, Kans					2															2
Atlanta, Ga		2																		2
Auburn, N. Y												1								1
Baltimore, Md			32																	32
Bangor, Me							2					6					1			9
Bellefontaine, Ohio							2	6												8
Billings, Mont										4										4
Binghamton, N. Y			1									19								20
Birmingham, Ala		10																		10
Bismarck, N. Dak				1						2										3
Bloomington, Ill	2																			2
Boston, Mass	46		119	5	1	93	17					192		149			159			781
Bradford, Pa												5								5
Brandon, Manitoba										6										6
Brantford, Ontario							1					4								5
Bridgeport, Conn	1		6			1	1					29		3						41
Brockton, Mass												1								1
Buffalo, N. Y	44	2	4	5	10		29	17			12	120		5						248
Burlington, Iowa	3				3		2						4							12
Burlington, Vt			1				1					1		1						4
Butte, Mont										16										16
Calgary, Alta	7									1										8
Cambridge, Ohio								2												2
Canton, Ohio								8			3	3								14
Carbondale, Ill	11																			11
Cedar Rapids, Iowa	2				5		1													8
Centerville, Iowa													2							2
Champaign, Ill	2																			2
Chester, Pa			7									2								9
Cheyenne, Wyo										1										1

TABLE 2—Continued.

Destination.	Louisiana.	Alabama.	Carolinas.	Arkansas.	Ozarks.	Virginia.	West Tennessee.	East Tennessee.	Texas.	Washington and Oregon.	Kentucky.	Delaware and Maryland.	Iowa.	New Jersey.	Michigan.	Indiana.	Connecticut.	New York.	Wisconsin.	Total receipts.
Chicago, Ill	647	1			76		75	10		11	36	26			2					884
Cincinnati, Ohio	1	163					29	203												396
Clarksburg, W. Va							4													4
Cleveland, Ohio	6	22					9	67			12	30								146
Coffeyville, Kans									2											2
Colorado Springs, Colo					4															4
Columbus, Ohio		11					29	39			12	9								100
Concordia, Kans				2	2															4
Conneaut, Ohio								1												1
Corning, N. Y												3								3
Council Bluffs, Iowa	1				1		1						1							4
Crookston, Minn										4										4
Dallas, Tex									2											2
Davenport, Iowa	8			2	5		2													17
Dayton, Ohio		5					3	31			1									40
Deadwood, S. Dak					2					3										5
Delaware, Ohio							2													2
Denver, Colo	18			4	43					2										67
Des Moines, Iowa	30			3	27								1							61
Detroit, Mich	24	58	1		18		20	32		3	23	48			1					228
Devils Lake, N. Dak										1										1
Dover, N. H							1													1
Du Bois, Pa			1									1								2
Dubuque, Iowa							3													3
Duluth, Minn	2			4	5		5			7									9	32
Edmonton, Alta										1										1
Elmira, N. Y			14			4	5	1				43								67
Elgin, Ill	1						1	2												4
El Paso, Tex					2															2
Erie, Pa	2		4					4				16								26
Evansville, Ind		2					5													7
Fargo, N. Dak	2									7										9
Findlay, Ohio							1	4												5
Fitchburg, Mass			1				1					7		1						10
Flint, Mich								9				1								10
Fonda, N. Y												2								2
Fort Dodge, Iowa				1	3															4
Fort Smith, Ark					1															1
Fort Wayne, Ind	3				1		9	11			1	1			1					27
Fort Worth, Tex									4											4

Freeport, Ill.	4			1	1														6
Freemont, Nebr	1			1	1														3
Galesburg, Ill.						10						7							17
Grafton, N. Dak.									5										5
Glen Falls, N. Y.			3								15								18
Grand Forks, N. Dak.					2				8										10
Grand Island, Nebr.	3				8	3			1										15
Grand Rapids, Mich.	11	22			1	6	4				3			1					48
Great Falls, Mont.									3										3
Hamilton, Ohio							2												2
Hamilton, Ontario			2	1			1				45								49
Hannibal, Mo.				8	1	3						2							14
Harrisburg, Pa.			2								5								7
Hartford, Conn.			9			1					31		5						46
Hastings, Nebr.	1			1	3														5
Haverhill, Mass.						1													1
Hazelton, Pa.			1																1
Helena, Mont.									3										3
Hutchinson, Kans.				1	9			2											12
Indianapolis, Ind.	30	2			2	18	22			2				1	10				87
Ithaca, N. Y.						1					9								10
Jacksonville, Fla.						2													2
Jamestown, N. Y.	1									2	1								4
Jersey City, N. J.			1								300		800						1,101
Johnstown, Pa.			1								8								9
Joplin, Mo.					1			2											3
Kansas City, Mo.	27			8	146			19	2										202
Keene, N. H.											6						1		7
Keokuk, Iowa				1		2													3
Kokomo, Ind.							2												2
La Crosse, Wis.						2						4							6
Lafayette, Ind.	4				1														5
Lansing, Kans.					1														1
Lansing, Mich.		2																	2
Laramie, Wyo.									1										1
Lawrence, Mass.											2								2
Lewiston, Mont.									2										2
Lexington, Ky.		1					1												2
Lima, Ohio		1					16			1	4								22
Lincoln, Nebr.	15			1	13	1	1		3										34
Livingston, Mont.									1										1
Lockport, N. Y.											11								11
Logansport, Ind.						3	2			3									8
London, Ont.			1								4								5
Louisville, Ky.	6	1				12	1			1									21
Lowell, Mass.			2			2					11								15
Macon, Ga.						2													2
Mankato, Minn.				2	3	4													9
Marion, Ohio						2	7				1								10
Mason City, Iowa				4	2	2													8
Marshfield, Wis.	2																		2
Manchester, N. H.						4	5				7						1		17

TABLE 2—Continued.

Destination.	Louisiana.	Alabama.	Carolinas.	Arkansas.	Ozarks.	Virginia.	West Tennessee.	East Tennessee.	Texas.	Washington and Oregon.	Kentucky.	Delaware and Maryland.	Iowa.	New Jersey.	Michigan.	Indiana.	Connecticut.	New York.	Wisconsin.	Total receipts.
Mansfield, Ohio							1	5												6
Medina, N. Y												4								4
Melrose, New York City												3								3
Middletown, Ohio								3												3
Milwaukee, Wis	24				33		7								5					69
Minneapolis, Minn	42			33	71		8	1		15			14						3	187
Mitchell, S. Dak				1	1															2
Monarch, Pa												1								1
Montreal, Quebeck	25		5				1					56								87
Moose Jaw, Saskatchewan										1										1
Muncie, Ind							4	8												12
Muskegon, Mich		1																		1
Muskogee, Okla	1																			1
Newark, N. J			61			11						76		86						234
Newark, Ohio								2												2
New Bedford, Mass						1	1					12								14
New Britain, Conn												1		2						3
New Haven, Conn			1			1						14								16
New London, Conn												1								1
New York, N. Y	10		319			169						19		100			2			619
North Adams, Mass			1			2	3					9		3						18
Norwich, Conn			2			2						8								12
Oelwein, Iowa				3									1							4
Ogdensburg, N. Y							1					21								22
Oil City, Pa												5								5
Oklahoma City, Okla	8				6				1											15
Olean, N. Y			2				1					9								12
Omaha, Nebr	41			6	52		2			10										111
Oneonta, N. Y												1								1
Ottawa, Ontario	1		2		2		1					22								28
Ottumwa, Iowa	1				1		2													4
Parkersburg, W. Va							3	1												4
Paterson, N. J			2									5								7
Peoria, Ill	10																			10
Petersburg, Va							1													1
Philadelphia, Pa	3		136			55						41		65						300
Phillipsburg, Pa												29		31						60
Pittsburgh, Pa	42	6	41	1	3	7	36	32			31	149		5				6		359
Pittsfield, Mass											2	4								6
Pocatello, Idaho										4										4

Portage La Prairie, Manitoba										2									2
Portland, Me			3			5	4					33					10		55
Portsmouth, Ohio								2											2
Potomac Yard, Wash			56																56
Pottsville, Pa												3							3
Providence, R. I	7		14			20	1					49		6					97
Pueblo, Colo	1			2	8				1										12
Quincy, Ill							1												1
Reading, Pa			1																1
Regina, Saskatchewan	2							1											3
Richmond, Ind							3	5											8
Richmond, Va			13																13
Ridgley, Ind												1							1
Roanoke, Va			7																7
Rochester, N. Y			3			2	6	2			1	102		4					120
Rockford, Ill	2				2		1												5
Rouses Point, N. Y												7							7
Rugby, N. Dak										1									1
Rutland, Vt												3		2					5
Saginaw, Mich					1											1			2
St. Joseph, Mo	2			5	7														14
St. Louis, Mo	58			151	13		10		4	1									237
St. Paul, Minn	28			18	52		4			6			6						114
Salina, Kans					9														9
Salt Lake City, Utah										2									2
San Antonio, Tex									4										4
Saskatoon, Saskatchewan										1									1
Schenectady, N. Y			2			1						25							28
Scranton, Pa			29									47							76
Seattle, Wash	2																		2
Sydney, Ohio								3											3
Sioux City, Iowa	13				61		1			5									80
Sioux Falls, S. Dak	7				5		1			2									15
South Bend, Ind	1						2	9											12
Springfield, Ill				8	1		6			2									17
Springfield, Mass			10			3	1					26		13					53
Springfield, Mo									2										2
Springfield, Ohio	1	1					5	9			1								17
Stamford, Conn												4							4
Staples, Minn										1									1
Steubenville, Ohio							1				1								2
Syracuse, N. Y			11			1	1					52							65
Terre Haute, Ind							6	1											7
Thief River Falls, Minn										3									3
Toledo, Ohio	5						3	55				1							64
Topeka, Kans	5				28				3										36
Toronto, Ontario	3		6					3				66							78
Troy, N. Y			9			1	1	1				29							41
Troy, Ohio								5											5
Tulsa, Okla	4								1										5
Utica, N. Y				1			2					20							23

TABLE 2—Continued.

Destination.	Louisiana.	Alabama.	Carolinas.	Arkansas.	Ozarks.	Virginia.	West Tennessee.	East Tennessee.	Texas.	Washington and Oregon.	Kentucky.	Delaware and Maryland.	Iowa.	New Jersey.	Michigan.	Indiana.	Connecticut.	New York.	Wisconsin.	Total receipts.
Valley City, N. Dak										1										1
Vancouver, British Columbia										1										1
Waco, Tex									1											1
Wahpeton, N. Dak										1										1
Washington, D. C			38																	38
Washington Court House, Ohio								1												1
Waterbury, Conn			4			1						9								14
Waterloo, Iowa	1			6	8		2													17
Watertown, N Y			1			1	2					40								44
Watertown, S Dak				1						8			1							10
Watuppa, Mass			2			3						3								8
Waverly, N. Y												1								1
Wheeling, W. Va							3	11			1	5								20
Wichita, Kans					12				6											18
Wilkes-Barre, Pa			10			2						34								46
Williamsport, Pa			5									2								7
Wilmington, Del			11									5								16
Winnipeg, Manitoba	13						1			25										39
Winona, Minn				2	1															3
Worcester, Mass	3		5			4	5					30		8						55
Yorktown, Saskatchewan										1										1
Youngstown, Ohio							2													2
Zanesville, Ohio							2	6												8
Various points					109															109
Total	1,335	314	1,042	297	899	405	506	693	57	191	150	2,226	44	1,291	12	10	174	6	12	9,664

TOTAL STRAWBERRY SHIPMENTS IN 1915.

Reports from the railroads at the end of the strawberry season were received by the Office of Markets and Rural Organization and have been tabulated in Table 3. This table shows the strawberry-shipping stations and the actual number of cars shipped from each during the 1915 season. They are grouped by States and by shipping districts and represent the final figures obtainable for shipments during the year.

TABLE 3.—*Strawberry shipments, 1915.*

ALABAMA.	
Castleberry section (Apr. 15 to June 1):	Carloads.
Castleberry	47
Atmore	21
Bolling	4
Total	72
York section (Apr. 15 to June 1):	
Cuba	42
York	23
Livingston	4
McConnell	1
Total	70
Cullman section (Apr. 15 to June 5):	
Cullman	65
Hanceville	22
Total	87
Thorsby section (Apr. 20 to June 1):	
Thorsby	22
Total	22
State total	251

ARKANSAS.	
Southwest section (Apr. 25 to June 1):	
Horatio	14
Cauthorn	6
Total	20
Judsonia section (Apr. 25 to June 5):	
Judsonia	187
Bald Knob	66
McRae	31
Searcy	25
Morrillton	17
Dardanelle	8
Leslie	7
Higginson	5
Bradford	4
Jonesboro	3
Pangburn	2
Marshall	1
Total	356
Ozark section (May 1 to June 5):	
Van Buren	45
Springdale	40
Johnsons	39

ARKANSAS—Continued.	
Ozark section (May 1 to June 5)—Con.	Carloads.
Alma	36
Farmington	35
Fayetteville	31
Decatur	15
Highfill	14
Dyer	12
Rudy	11
Mountainburg	10
Mulberry	9
Cave Springs	8
Tontitown	8
Avoca	6
Siloam Springs	6
Elm Springs	4
Garfield	4
Healing Springs	3
Litteral	2
Gentry	1
Total	339
State total	715

CALIFORNIA.	
Los Angeles section (Mar. 1 to Dec. 1):	
Gardena	*a* 27
Total	27
Sacramento section (Mar. 25 to Aug. 15):	
Sacramento	50
Florin	48
Total	98
Placer County section (Apr. 1 to June 1):	
New Castle	3
Total	3
Fresno section (Apr. 1 to Aug. 15):	
Fresno	56
Total	56
Santa Clara-Santa Cruz section (Apr. 1 to Dec. 1):	
Alviso	*175
Watsonville	174
Aromas and Vegas	80
Gilroy	6
Total	435

a Probably a large additional amount shipped locally on trucks and electric lines.
* Includes less than carload shipments.

TABLE 3.—*Strawberry shipments, 1915*—Continued.

CALIFORNIA—Continued.	
Siskiyou section (May 20 to July 15):	Carloads.
Sisson	16
Total	16
State total	418
COLORADO.	
Montrose	7
Steamboat Springs	2
State total	9
CONNECTICUT. (June 15 to July 1.)	
Branford	33
New Haven	5
State total	38
DELAWARE. (May 15 to June 20.)	
Selbyville	654
Bridgeville	348
Seaford	89
Frankford	69
Millsboro	53
Georgetown	51
Laurel	41
Wyoming	41
Lincoln City	34
Greenwood	29
Dagsboro	26
Delmar	19
Hartly	7
Cannon	4
Cheswold	4
State total	1,469
FLORIDA.	
Plant City section (Dec. 1 to Apr. 1):	
Plant City	201
Lakeland	21
Total	222
Starke section (Feb. 10 to May 15):	
Lawtey	160
Starke	115
Hampton	9
Raiford	2
Total	286
State total	508
GEORGIA. (May 1 to June 1.)	
Menlo	3
State total	3
ILLINOIS. (May 15 to June 20.)	
Anna	100
Villa Ridge	50
Farina	41
West Frankfort	39
Joppa	21

ILLINOIS—Continued.	
	Carloads.
La Clede	10
Ullin	1
State total	262
INDIANA. (May 25 to June 25.)	
New Albany	*112
Borden	*53
Pekin	*6
State total	[a] 171
IOWA. (June 1 to June 20.)	
Montrose	26
Keokuk	24
Ottumwa	2
State total	52
KANSAS. (May 20 to June 20.)	
Troy	10
Wathena	6
State total	16
KENTUCKY (May 10 to June 10).	
Bowling Green	156
Louisville	*33
Paducah	4
State total	[a] 193
LOUISIANA (Mar. 15 to May 20).	
Independence	*405
Hammond	*362
Amite	*116
Ponchatoula	*190
Tickfaw	*103
Mason	*18
Pickups	*206
State total	1,400
MARYLAND (May 15 to June 30).	
Marion	486
Pittsville	315
Fruitland	139
Princess Anne	101
Berlin	98
Showell	90
Hopewell	77
Willards	73
Ridgely	66
Westover	55
Whaleysville	54
Federalsburg	50
Crisfield	25
Eden	22
Baltimore	18
Costen	17
Pocomoke	16
Walstons	11
Salisbury	7
Kings Creek	6
East New Market	6
Henderson	5
Kingston	4

*Includes less than carload shipments.

[a] 97 cars from Indiana and 12 from Kentucky were express, and contained small quantities of commodities other than strawberries.

TABLE 3.—*Strawberry shipments, 1915*—Continued.

MARYLAND—Continued.	Carloads.
Loretto	2
Mardelia Springs	1
Boat pickups	198
State total	[a] 1,942
MASSACHUSETTS (June 20 to July 15).	
Falmouth	97
North Falmouth	2
Watuppa	1
State total	100
MICHIGAN (June 1 to July 18).	
Benton Harbor, St. Joseph	118
South Haven	66
Muskegon	54
Bridgman	33
Grand Haven	27
Bailey	2
Glendora	2
Whitehall	2
Michillinda	1
Sault Ste. Marie	1
Boat pickups	[b] 11
State total	317
MISSISSIPPI.	
Southern Osyka section (Apr. 10 to May 15):	
Osyka	19
Total	19
Sanford section (Apr. 10 to May 15):	
Sanford	33
Total	33
Lauderdale section (Apr. 15 to June 1):	
Russell	30
Total	30
Central Durant section (Apr. 20 to May 20):	
Madison	31
Durant	28
Jackson	16
Ridgeland	12
Total	87
State total	169
MISSOURI (May 15 to June 20).	
Neosho	127
Sarcoxie	118
Monett	95
Pierce City	64
Anderson	47
Butterfield	42
Logan	41
Republic	21
Stark City	19
Purdy	18
Goodman	14
Marionville	11
Carthage	8
Senaca	8
Wheaton	6

MISSOURI—Continued.	Carloads.
Verona	4
Mount Vernon	2
State total	645
NEW HAMPSHIRE (July).	
Manchester	1
State total	1
NEW JERSEY (May 25 to June 25).	
Port Norris	90
Landisville	75
Rosenhayn	66
Cedarville	58
Pedricktown	31
Hammonton	26
Mauricetown	22
Fairton	20
Egg Harbor	19
Richland	15
Newport	14
Norma	14
Leesburg	13
Cologne	9
West Moorestown	9
Vineland	8
Cedar Brook	7
Waterford	7
Belleplain	5
Elwood	3
Penns Grove	3
Newfield	1
Woodbine	1
State total	516
NEW YORK (June 1 to July 1).	
Scriba	38
Milton	32
Angola	31
New Haven	26
Oswego	26
Marlborough	25
Roseton	9
Mexico	8
Ripley	1
State total	196
NORTH CAROLINA (Apr. 15 to June 1).	
Chadbourn	210
Mount Tabor	160
Teacheys	100
Rose Hill	98
Mount Olive	95
Whiteville	39
Clarendon	36
Rocky Point	33
Wallace	23
Bladenboro	16
Faison	13
Willard	8
Abbottsburg	6
State total	837

[a] Maryland boat pickups include Virginia pickups from the eastern shore of Chesapeake Bay.

[b] Pickups from eastern shore of Lake Michigan.

TABLE 3.—*Strawberry shipments, 1915*—Continued.

	Carloads.
OHIO (June 1 to June 25).	
Leetonia	17
Perry	9
Marietta	6
Cincinnati	1
Lodi	1
State total	34
OREGON (May 25 to July 15).	
Hood River	193
State total	193
PENNSYLVANIA (June 1 to July 1).	
North East	74
Stoneboro	6
Scranton	1
State total	81
SOUTH CAROLINA (Apr. 12 to May 25).	
Loris	82
Conway	2
State total	84
SOUTH DAKOTA (June 15 to July 15).	
Stoux Falls	1
State total	1
TENNESSEE.	
Chattanooga section (May 1 to June 5):	
Dayton	155
Evensville	142
Spring City	140
Sale Creek	37
Bakewell	34
Knoxville	32
Sheffield	24
Chattanooga	19
Boyce	16
Lancing	10
Graysville	4
Rathburn	4
Rockwood	3
Total	620
Dyer-Sharon-Humboldt section (May 1 to June 5):	
Humboldt	252
Medina	71
Dyer	63
Sharon	56
Gates	47
Kenton	46
Jackson	45
Curve	39
Ripley	36
Gadsden	33
Bells	29
Halls	17
Trezevant	16
Grand Junction	15
Milan	12
TENNESSEE—Continued.	
Dyer-Sharon-Humboldt section—Contd.	
Dresden	12
Greenfield	12
Portland	8
Trenton	8
Bradford	6
Gibson	6
Obion	6
Nashville	4
Total	839
State total	1,459
TEXAS.	
Alvin Section (Mar. 1 to May 15):	
Deepwater	81
Alvin	47
Dickinson	20
Houston	11
Total	159
Artesian Belt section (Mar. 1 to May 15):	
Carrizo Springs	14
Total	14
Tyler section (Apr. 1 to May 10):	
Winnsboro	41
Tyler	33
Lindale	15
North Jefferson	6
Jefferson	6
Swan	6
Hawkins	2
Marshall	2
Total	111
Brownsville section (Mar. 15 to May 1):	
San Benito	1
Total	1
State total	285
UTAH (June 5 to July 1).	
Provo	4
State total	4
VIRGINIA.	
Norfolk section (May 1 to June 1)	444
Total	444
Eastern shore section (May 5 to June 5):	
Onley	61
Mears	29
Parksley	22
Tasley	20
Keller	19
Melfa	17
Painter	12
Makemie Park	10
Lecato	6
Total	[a] 196
State total	640

[a] This does not include Norfolk section.

TABLE 3.—*Strawberry shipments, 1915*—Continued.

WASHINGTON (May 20 to July 15)	Carloads.
White Salmon	40
Spokane	30
Kennewick	29
Seattle	26
Edmonds	5
Lynden	3
Bellingham	2
Tacoma	2
Centralia	2
Auburn	1
North Yakima	1
Richmond Beach	1
State total	142
WISCONSIN (June 5 to July 15).	
Racine	21
Bayfield	10
Sturgeon Bay	10
State total	41
Grand total	13,409

Owing to the fact that certain well-known commercial strawberry areas do not lie entirely within State borders, the following tabulation gives certain shipments on a district rather than on a State basis. The data given below are included in the grand total and are simply a rearrangement of some of the material included under State headings.

TABLE 4.—*Supplementary tabulation of strawberry shipments in 1915 by districts.*

PENINSULAR SECTION (May 10 to June 15).	Carloads.
Selbyville, Del	654
Marion, Md	486
Bridgeville, Del	348
Pittsville, Md	315
Fruitland, Md	139
Princess Anne, Md	101
Berlin, Md	98
Showell, Md	90
Seaford, Del	89
Hopewell, Md	77
Willards, Md	73
Frankford, Del	69
Ridgely, Md	66
Onley, Va	61
Westover, Md	55
Whaleysville, Md	54
Millsboro, Del	53
Georgetown, Del	51
Federalsburg, Md	50
Laurel, Del	41
Wyoming, Del	41
Lincoln City, Del	34
Greenwood, Del	29
Mears, Va	29
Dagsboro, Del	26
Crisfield, Md	25
Eden, Md	22
Parksley, Va	22
Tasley, Va	20
Delmar, Del	19
Keller, Va	19
Coston, Md	17
Melfa, Va	17
Pocomoke, Md	16
Painter, Va	12
Walstons, Md	11
Makemie Park, Va	10
Hartley, Del	7
Salisbury, Md	7
East New Market, Md	6
Kings Creek, Md	6
Lecato, Va	6
Henderson, Md	5
Cannon, Del	4
Cheswold, Del	4
Kingston, Md	4
Loretto, Md	2
Mardelia Springs, Md	1
Boat pickups, Maryland and Virginia	198
Total	3,589

OZARK SECTION (May 1 to June 15).	
Neosho, Mo	127
Sarcoxie, Mo	118
Monett, Mo	95
Pierce City, Mo	64
Anderson, Mo	47
Van Buren, Ark	45
Butterfield, Mo	42
Logan, Mo	41
Springdale, Ark	40
Johnsons, Ark	39
Alma, Ark	36
Farmington, Ark	35
Fayetteville, Ark	31
Republic, Mo	21
Stark City, Mo	19
Purdy, Mo	18
Decatur, Ark	15
Goodman, Mo	14
Highfill, Ark	14
Dyer, Ark	12
Marionville, Mo	11
Rudy, Ark	11
Mountainburg, Ark	10

TABLE 4.—*Supplementary tabulation of strawberry shipments in 1915 by districts*—Con.

OZARK SECTION—Continued.	Carloads.
Mulberry, Ark.	9
Carthage, Mo.	8
Cave Springs, Ark.	8
Seneca, Mo.	8
Tontitown, Ark.	8
Avoca, Ark.	6
Siloam Springs, Ark.	6
Wheaton, Mo.	6

OZARK SECTION—Continued.	Carloads.
Elm Springs, Ark.	4
Garfield, Ark.	4
Verona, Mo.	4
Healing Springs, Ark.	3
Litteral, Ark.	2
Mount Vernon, Mo.	2
Gentry, Ark.	1
Total.	984

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